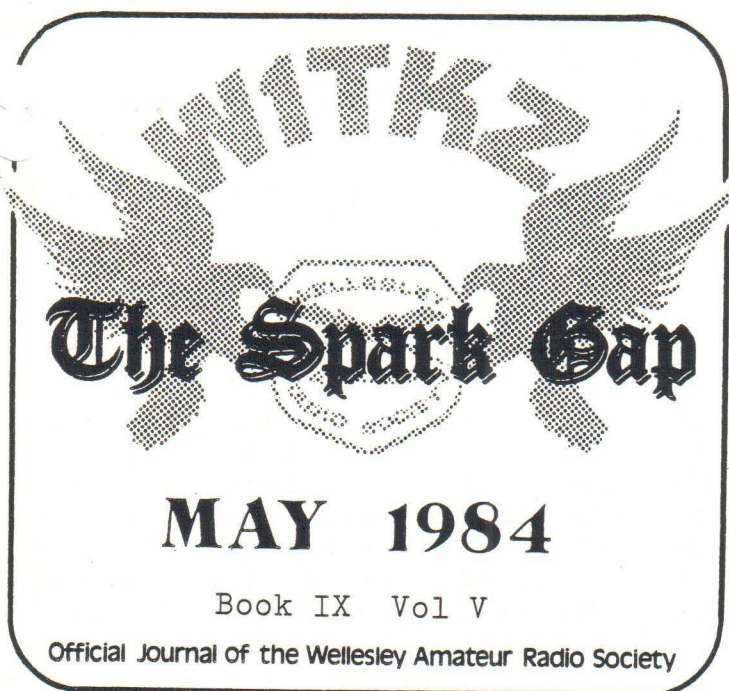




Boston Marathon

For the seventh consecutive year the Wellesley Amateur Radio Society has played a major part in the running of the BAA Boston Marathon. Under the organization of Dick Paret, W1ZLQ, some fifty hams were involved in various parts of the operation aiding the BAA.

As in past years, operations began early in the morning. Those people who had to get to Hopkinton to ride one of the course vehicles had to meet in Boston before 8:00 a.m. to get a ride to the starting line. In addition to just riding the buses, there was some operation in the morning between race officials.

Unfortunately, the morning brought some heavy rain, making conditions for those who had to operate outside rather unpleasant.

Our real operation began about an hour before the noon start of the race. By this time net control W1TKZ was on the air and callups were made on the two main net frequencies to insure that everyone was in place.

The large Hopkinton contingent was in the process of trying to set up stations on rain soaked vehicles and for about half the operators this required remaining outside in the back of a pickup truck or some other open vehicle. The checkpoint operators were also getting into place and on the air while meeting with the officials they would be working with.

The wheelchair race began at 11:45 a.m. and with it the start of our main operation. With an operator in the wheelchair pace car and the checkpoint operators this part of the race was well covered.

The main event went off right at noon, started by our net control who was synchronized with WWV for an accurate start. There were five vehicles which moved over the course with the runners, all of which were manned by our operators. As the grand procession worked its way through Hopkinton, Ashland, Framingham, Natick, right past our club headquarters in Wellesley, Newton, Brighton and finally Boston, accurate information on the status of both the male and female leaders were provided.

Despite some organizational problems before the race and the usual few human errors during the race, for the most part our operation was once again a success. Dick Paret is to be commended for his many hours of hard work in organization. We like to thank the many volunteers, both W.A.R.S. members and non-members who put in many hours on race day. Finally, we would like to thank the owners and users of the Waltham 146.64 repeater for the use of the machine during the race.

ANNOUNCEMENT

The programs for the May meetings had not been set by our printing deadline, but hope to see you at the meetings anyway.

MEETINGS THIS MONTH:

May 3, 1984, at 7:30 p.m.

May 17, 1984, at 7:30 p.m.

211 Washington St., Wellesley

ELECTRONICS EXCHANGE

FOR SALE: Military R-174 "Army" mobile H.F. receiver; AM-CW 1.5 through 18 MHz; "home-brew" power supply with speaker built in. Works great! \$25.

FOR SALE: Military CV-591A SSB converter, 455 kHz IF or 225 kHz to 1.5 MHz IF; with proper crystal in H.F. oscillator; with manual. \$25.

FOR SALE: Military CV-278 FSK converter, 455 kHz IF; input Z=50 ohms; "Like new" condition with operator and maintenance manuals. \$25.

FOR SALE: Heath VHF-1 "Seneca" 6 and 2 meter transmitter AM-CW; VFO or crystal; 150 watts; pair of 6146's in final; manual -- "not working". \$25.

FOR SALE: Military ME-26D/U multi-meter. DC - 1 to 1000 volts; AC - 1 to 300 volts; Ohms - 500 to 500 meg; RF - 1 to 300 volts to 300 MHz within 1 dB, to 700 MHz within 3 dB; AC-DC within 3% full scale. Excellent condition with manual. \$50.

FOR SALE: Military R-389 L.F. receiver. Collins manufacture; 15 kHz to 1.5 MHz; A1, A2, A3, F1 (FSK); double conversion; original manual; was working, now needs a tube check. \$100.

If you would like to help KLOGF with his clean out sale on the above items, call Erik Thoresen at 655-7048.

OFFICIAL BULLETIN

Number 24, dated March 27, 1984:

The State Department has informed ARRL Hq. that a third party traffic agreement is now in effect between the United States and Dominica, J7.

NEW CLUB MEMBERS

This month we would like to welcome Helen and Louie Holmes of Newton as club members. Though they are not yet

licensed, they are very interested in learning about Amateur Radio. Also, we would like to welcome Paul Monroe, Jr., KALDV, of Auburndale who recently received his Novice license. We hope your memberships will be of benefit to all of you. The total W.A.R.S. membership is now 101.

Hamnews

The decision of the ARRL Board of Directors to go ahead with involvement in the Volunteer Examination Program is contingent with the ability of VECs to recoup expenses incurred administering the program. On the effective date of the Rules change that permits collection of fees to offset expenses, the ARRL will file application to become a VEC in all 13 testing districts and will attempt to conclude an agreement with the FCC for that purpose. The League has already filed comments on PR Docket 84-265 expressing its support of the implementation of fees. Tnx KB1N.

Westlink Report, April 20, 1984

OFFICERS

PRESIDENT:

Nels Anderson, K1UR, 872-5259

VICE PRESIDENT:

David Curry, K1TK, 237-2450

RECORDING SECRETARY:

David Kent, N2AWG, 647-9334

CORRESPONDING SECRETARY:

Allan Bacon, K1BA, 749-4382

TREASURER:

C.J. McDonald, WB1BUM, 332-6091

FUND RAISING:

Kevin Kelly, W1YHV, 242-0341

OPERATING ACTIVITIES:

Erik Thoresen, KLOGF, 655-7048

EDUCATION CHAIRMAN:

Art Thompson, KA1ENP, 235-5509

STATION MANAGER:

Bob Drapeau, KT1K, 883-1132

REPEATER COMMITTEE:

Tom Kinahan, N1CPE, 899-5924

Bill Hanlon, N1ADY, 384-8056

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society



EDITOR:

NELS ANDERSON, K1UR
92 BISHOP DRIVE
FRAMINGHAM, MASS. 01701
872-5259

THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS PRIMARY PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, FCC RULES AND REGULATIONS CHANGES, AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE "SPARK GAP" AND MAY SEND THEIR ARTICLES TO THE EDITOR. ITEMS PRINTED IN THE "SPARK GAP" MAY BE REPRINTED BY OTHER AMATEUR RADIO PUBLICATIONS PROVIDED THE AUTHOR AND THE "SPARK GAP" ARE GIVEN CREDIT.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION, AND ENCOURAGEMENT OF PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY IS \$8.00. THE CLUB YEAR RUNS SEPTEMBER 1 TO AUGUST 31. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS, OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE:

THE WELLESLEY AMATEUR RADIO SOCIETY
211 WASHINGTON STREET
WELLESLEY HILLS, MASS. 02181



MINUTES

Meeting of April 5, 1984:

The meeting was opened at 7:39 p.m. by President Nels Anderson, K1UR, with about 25 present.

The Treasurer's report was given.

Kevin Kelly, W1YHV, reported on the progress of auction preparations.

Tom Kinahan, N1CPE, reported on the state of the repeater, which seems to be having problems at the receive site now.

Mort Cohan, K1IU, gave some information on the OSCAR satellites.

C.J. McDonald, WB1BUM, conducted the nomination of officers for the club year starting September 1, 1984.

Art Thompson, K1ENP, gave a report on the recently completed Novice class. He reported that ten students

have taken and passed the exam and are awaiting their calls.

The meeting was closed at 8:05 p.m.

Meeting of April 19, 1984:

The meeting was opened at 7:43 p.m. by President Nels Anderson, K1UR, with about 20 present.

The Treasurer's report was given.

A report on the auction was given. We made about what we had planned for in the budget, and additionally the repeater fund was aided.

There being no further business, the meeting was closed at 7:50 p.m. The remainder of the program was a videotape entitled "Amateur Radio's Newest Frontier" describing the ham-in-space operation of W5LFL, Dr. Owen Garriott, aboard the Space Shuttle Columbia during mission STS-9.

Public Service

On Sunday, May 20 we have been asked to help with a road race sponsored by the Wellesley Recreation Department. About 5-6 hams, mostly with hand-held two meter equipment will be needed for a three to four hour period starting at 11:00 a.m. (The race itself starts at 1:00 p.m. from Wellesley H.S.) Most operators will be along the race course with officials or medical people. If you can help with this event, please contact Nels Anderson, K1UR, at 872-5259.

Elections

Yes, it's that time of year again when we must elect a new slate of officers. While it's hardly over yet, the 1983/84 club year seems to have gone by very quickly. Elections will be held at the May 17 meeting and since several offices are contested this year, it is hoped you can make it. If not, you can vote by mail with the ballot enclosed in this issue. Please mail it to the club so that it arrives by May 17.

Auction

Our 1984 spring auction was held on April 16 with perfect weather for an auction, that is, too rainy for doing anything outside but not so bad as to inhibit traveling.

We began setup right at 9:00 a.m. and despite a rather small group of helpers everything was ready in record time. In fact, we were almost ready by the time people started bringing things in to sell which was somewhat before 9:30 despite the advertised 10:00 a.m. check-in time. Everything went pretty smoothly and by the 11:00 a.m. start of the auction we had quite a few tables of various stuff to sell.

The action started a little after 11:00 a.m. when auctioneer Rick Poole, W1LRKT, took the microphone and began taking bids. There were some pretty nice items for sale, including a surprising number of HF rigs at bargain prices (how about a TS-520 in mint condition for \$350?). A lot of people should have gone home happy with deals like these. While the auction was going on, the bargain table and food stand were also doing a good business. Erik Thoresen, K1OGF, cleaned out his basement especially for the auction with much of it ending up on the bargain table. Erik donated the proceeds of his sales to the repeater improvement fund.

After some three hours of selling, the gavel fell on the final item, and the auction was over. Clean-up went very quickly and we were soon next door in the club tallying up the proceeds (or at least trying to). As is traditional, we ended the day with a pizza party which was held this year at Papa Gino's in Natick which gave everyone a chance to relax after a good days work. All in all, a very enjoyable and successful day. Thanks to all those club members who helped out, and to Rick Poole, W1LRKT, for once again helping us out as the auctioneer.

Hamnews

A major enforcement effort against uncoordinated repeaters that cause interference to coordinated systems, and other matters involving simplex to repeater QRM appear to be shaping up.

While the FCC refuses any official comment, other sources indicate that at least three cities will shortly see this type of enforcement activity.

The sources expect the FCC to follow up quickly on the heels of its recent action in San Diego that removed an uncoordinated system from two meters and similar orders issued to uncoordinated repeaters in the Scottsdale, Arizona, and the New York City areas.

Failure to comply with such an order could lead to license suspension against the system trustee and its eventual revocation.

The sources we spoke with also said to look for those simplex operators who harass repeaters and claim squatters' rights to the frequency to come under FCC scrutiny. Westlink has learned that the Commission is investigating such a case in Southern California wherein upwards of two dozen hams may be involved in the organized harassment of a coordinated repeater. If action is taken, it could be the largest such sweep in the history of FCC enforcement activities.

Westlink Report, April 20, 1984

Dennis R. Patrick has been confirmed as a Commissioner on the FCC. The action took place on March 30, although Patrick has been serving as a recess appointee since December 2.

Mr. Patrick has served as an Associate Director for Legal and Regulatory Agencies, Office of Presidential Personnel at the White House from December, 1981 through October, 1983.

After that, he was a Special Assistant Administrator of the NTIA. From 1976-1981, Patrick practiced law in Los Angeles, California.

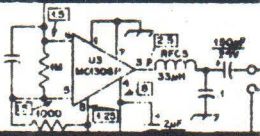
Westlink Report, April 20, 1984

REPEATER

by Tom Kinahan, NLCPE

The repeater committee is now examining the situation of our repeater. We are presently formulating a list of requirements of the repeater such as coverage area, number of members within the coverage area, what we need a repeater for, what we have and how it fills our needs, and finally what we should do to meet those needs. Any input to this process would be appreciated and you can direct them to either Bill Hanlon, NLADY, or myself. We currently plan a presentation of the results, and a general discussion about this at some future time. Stay tuned to 147.03 and the SPARK GAP for more information.

Tek Tok



A world-wide beacon network allows you to check propagation conditions on 20 meters. Listening for ten minutes on 14.1 MHz will enable you to evaluate many possible paths and the minimum power level required for each. The world-wide beacon network was founded by the Northern California DX Foundation to give listeners the opportunity to investigate signal propagation. The network currently includes eight stations, located around the world. Each station runs no more than 100 watts to an omnidirectional antenna. The stations are as follows:

<u>STATION</u>	<u>LOCATION</u>	<u>TIME</u>
4U1UN/B	New York	0000
W6WX/B	California	0001
KH6O/B	Hawaii	0002
JA2IGY/B	Japan	0003
4X6TU/B	Israel	0004
OH2B	Finland	0005
CT3B	Madeira Island	0006
ZS6DN/B	South Africa	0007

These stations broadcast in the sequence shown. Each station broadcasts for one minute during each ten minute period, 24 hours a day. The sequence begins on a multiple of ten minutes with 4U1UN/B in New York. The station identifies at the 100 watt level, then transmits a continuous carrier for 9 seconds. This is followed by a one second interruption, a drop in power to 10 watts and another continuous carrier for 9 seconds. This is repeated at one watt and again at 100 milliwatts. The station then returns to the 100 watt level and identifies. The next minute transmission is from W6WX/B. This continues through the list. The format is summarized as follows:

<u>POWER LEVEL</u>	<u>TRANSMISSION</u>
100 watts	QST de (call)
100 watts	9 second dash
10 watts	9 second dash
1 watt	9 second dash
100 mw	9 second dash
100 watts	SK (call)

Transmission time: 58 seconds
Speed: 20 wpm

These's a lot to be learned from listening to these beacons. Compare what you hear with the WWV propagation forecasts. Use the beacons to compare antennas or receivers. Find out what you can do with one watt or even 100 mw. (This information is a summary of a column by Dave Ingram, K4TWJ, in March 1984 CQ, via SARA and K1JMR Newscarrrier.)

Hamnews

Wayne Green, W2NSD, publisher of 73 Magazine, has had his "mandatory CW retesting of all Amateur operators" rule making request dismissed. It was never assigned a Rule Make number by the FCC who said that Green's proposal offered nothing new in the way of incentive to upgrade skill.

Westlink Report, April 6, 1984

CHUCKLE KORN-LR

HOW TO PASS AN AMATEUR EXAM

from January, 1936 QST, via ARNS

(Editor's note: for those of you going in for an FCC exam this month, here are some examples of how not to answer the questions!)

Everyone who grades examination papers encounters an occasional dizzy sidesplitter. The rather monotonous life of the FCC Amateur examiners is thus frequently relieved. From their files they have garnered the following gems, which we publish with the kind permission of the Commission. Read, you fellows, and learn how readily possible it is to improve upon the "License Manual". (Note: back in the days when this was written, FCC exams were essay not multiple choice.)

Q. What are the meanings of SOS, QRT, QRM, Mayday, CQ?

A. Mayday is the high power holiday.

A. May day possibly refers to a semi-political activity indulged in annually by certain political factions.

Q. What class of radio communication holds precedence over all others?

A. The distress call SOS for steamship, and the word "Maytag" for aircraft are the stop and listen signs of the radio world.

Q. What penalty may be imposed for transmitting a false or fraudulent distress call?

A. The station license may be revoked.

Q. For what purpose may the call signal CQ be used?

A. When you need help, send CQ and sign your own call letters.

Q. What is a Radio Amateur?

A. An Amateur is a dually licensed person.

Q. In radio telephony, what is a gain control?

A. A gain control prohibits the operation of an Amateur Radio station for the purpose of profit.

Hearabouts....

Don't forget our Sunday night news, held at 7:00 p.m. on 147.63/03. Contact Erik Thoresen, KLOGF, always has the latest information on club and other doings. We have had several new people check in during the past month which is good to see.

The monthly breakfast schedule last month had a bit of a problem since the scheduled fourth Sunday of the month date was also Easter. After the Spark Gap was printed, the breakfast was moved to Saturday, April 28. This month we (hopefully) have no conflicts, and the breakfast meeting will be held May 20, starting around 9:00 a.m. at Friendly's, Route 135, near Natick Center.

Don't forget that the Hosstrader's Swapfest in Deerfield, N.H. is this month, to be specific on Saturday May 12. If you've never been, just try imagining a fairgrounds full of several thousand hams buying and selling. Or better yet, come up and see it yourself.

Hamnews

On March 28, ARRL filed a Petition for Rulemaking seeking early implementation of the Amateur Service allocations at 24.89-24.99 and 902-928 MHz. The mode subdivisions proposed for the 24 MHz band correspond to IARU band plans adopted in the three IARU Regions. If granted, our petition would result in operation being permitted at the usual Amateur power levels by General and higher class licensees at 24 MHz, and Technician and higher class licensees at 902 MHz.

The U.S. government still has Fixed Service operations in the 18 MHz band and will not be ready to release that band to the Amateur Service until those operations have been relocated elsewhere. The latest that can occur under the international Radio Regulations is July 1, 1989, but there is reason to expect action somewhat earlier.

lier; we're continuing to maintain a close watch on the situation.

ARRL Letter, April 12, 1984

Stuart Cowan, W2LX, Doug DeMaw, W1FB, Robert Haviland, W4MB, William Orr, W6SAI, and A. Prose Walker, W4BW -- all holders of experimental licenses for the 18 and 24 MHz bands -- have petitioned FCC (RM-4781) to permit Amateur operation in these bands on a non-interference basis during the interim period preceding our gaining them as exclusive allocations. The joint petition requests A1 emission throughout each band, and A3 (ssb only) emission in the top half of each band. (By contrast, band plans adopted in all three IARU regions call for 18.068-18.100 and 24.890-24.920 MHz to be CW only, 18.100-18.110 and 24.920-24.930 MHz to be CW and RTTY, and 18.110-18.168 and 24.930-24.990 MHz to be CW and phone.)

ARRL Letter, April 12, 1984

Acting on information provided by Fort Worth Amateur Radio operators, Dallas FCC recently investigated illegal use of the two meter band. As a result of this action, Hanson Properties, of Arlington, Texas, was fined \$2000 for operating an unlicensed radio station on 144.08 MHz. The operation was coordinating commercial business activity on an Amateur frequency. Investigation revealed that this operation had been going on for six months.

ARRL Letter, April 12, 1984

Amateur Radio may again go into space. Within the next 18 months, ham radio may be invited to fly along on two shuttle missions. This information was made public after a meeting at the Johnson Space Center in Houston on March 9.

Attending the discussion session were NASA officials, astronauts Owen Garriott (W5LFL) and Tony Englund (W0ORE), ARRL Public Information Officer Peter O'Dell (KB1N) and NBC Network News correspondent Roy Neal

(K6DUE). The purpose of the gathering was to critique December's STS-9 operation by Dr. Garriott and to evaluate the future of Amateur Radio in manned space flight.

Englund indicated his intention to operate from space during Flight 51B in November of this year, if NASA will grant him permission. There is also the possibility that another "ham in space" operation could occur on Flight 51F, scheduled for March 1985.

Westlink Report, March 23, 1984

Amateur exams will once again be given at the Dayton Hamvention. The Dayton Amateur Radio Association intends to exercise its newly confirmed 8th District VEC appointment by initiating the Volunteer Examination Program at this year's Hamvention.

Only Novice, Technician and General Class tests will be given because the necessary questions for elements 4A and 4B are not yet ready. In addition, CW testing at 5, 13 and 20 wpm will be given.

Westlink Report, March 23, 1984

Rules to govern the operation of simplex auto-patch interconnect devices in the Amateur Service are being sought by the FCC.

Specifically, the Commission would be receptive to receiving a Request for Rule Making from an established Repeater Coordination Council which has had experience in integrating users of these devices into existing area activities.

Westlink Report, March 23, 1984

The ARRL Board of Directors met in Hartford March 26-27. One of the first items on the agenda was the election of officers to serve until the 1986 Annual Meeting. The new ARRL President is Larry E. Price, W4RA.

The Board also reviewed background material on ARRL participation in the Volunteer Examiner Program along with many other matters. Complete details are in the May issue of QST.

ARRL Letter, March 29, 1984

WELLESLEY AMATEUR RADIO SOCIETY
211 Washington Street
Wellesley, Mass. 02181

ELECTIONS FOR 1984-85

PRESIDENT:

Nels Anderson, K1UR

VICE PRESIDENT:

David Curry, K1TK

CORRESPONDING SECRETARY:

Allan Bacon, K1BA

RECORDING SECRETARY:

David Kent, N2AWG
Tom Kinahan, N1CPE

TREASURER:

C.J. McDonald, WB1BUM

FUND RAISING:

Kevin Kelly, WA1YHV

OPERATING ACTIVITIES:

Erik Thoresen, K1OGF
John McReynolds, WA1WDE

These people have been nominated and accepted the nominations for the offices shown. Please select one person for each office. If you cannot attend the election meeting on May 17, please fill out this ballot and mail it to the club so that it arrives by May 17, otherwise, please plan on voting at the May 17 meeting. If you do mail in your ballot, do not write your name on the ballot itself but do put your name on the envelope you use to mail it.